MODEL G0790
12½" BENCHTOP PLANER w/DUST COLLECTION
OWNER'S MANUAL
(For models manufactured since 9/15)

C ETL LISTED US
Intertek
3092372

#MNWKAW17040 PRINTED IN CHINA
V2.09.15

⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Table of Contents

INTRODUCTION

Contact Info

We stand behind our machines! If you have questions or need help, contact us with the information below. Before contacting, make sure you get the **serial number** and **manufacture date** from the machine ID label. This will help us help you faster.

Grizzly Technical Support
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

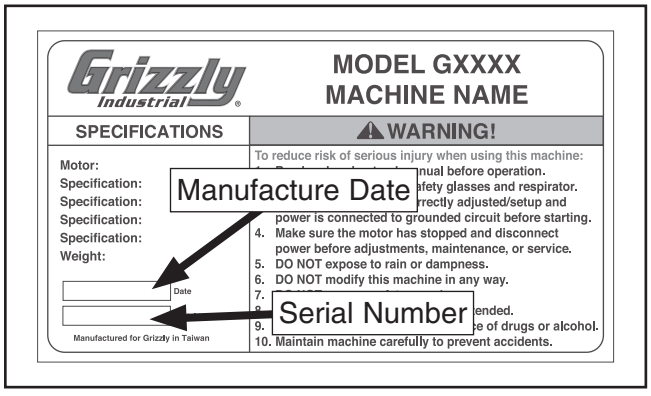
Manual Accuracy

We are proud to provide a high-quality owner's manual with your new machine!

We made every effort to be exact with the instructions, specifications, drawings, and photographs in this manual. Sometimes we make mistakes, but our policy of continuous improvement also means that **sometimes the machine you receive is slightly different than shown in the manual**.

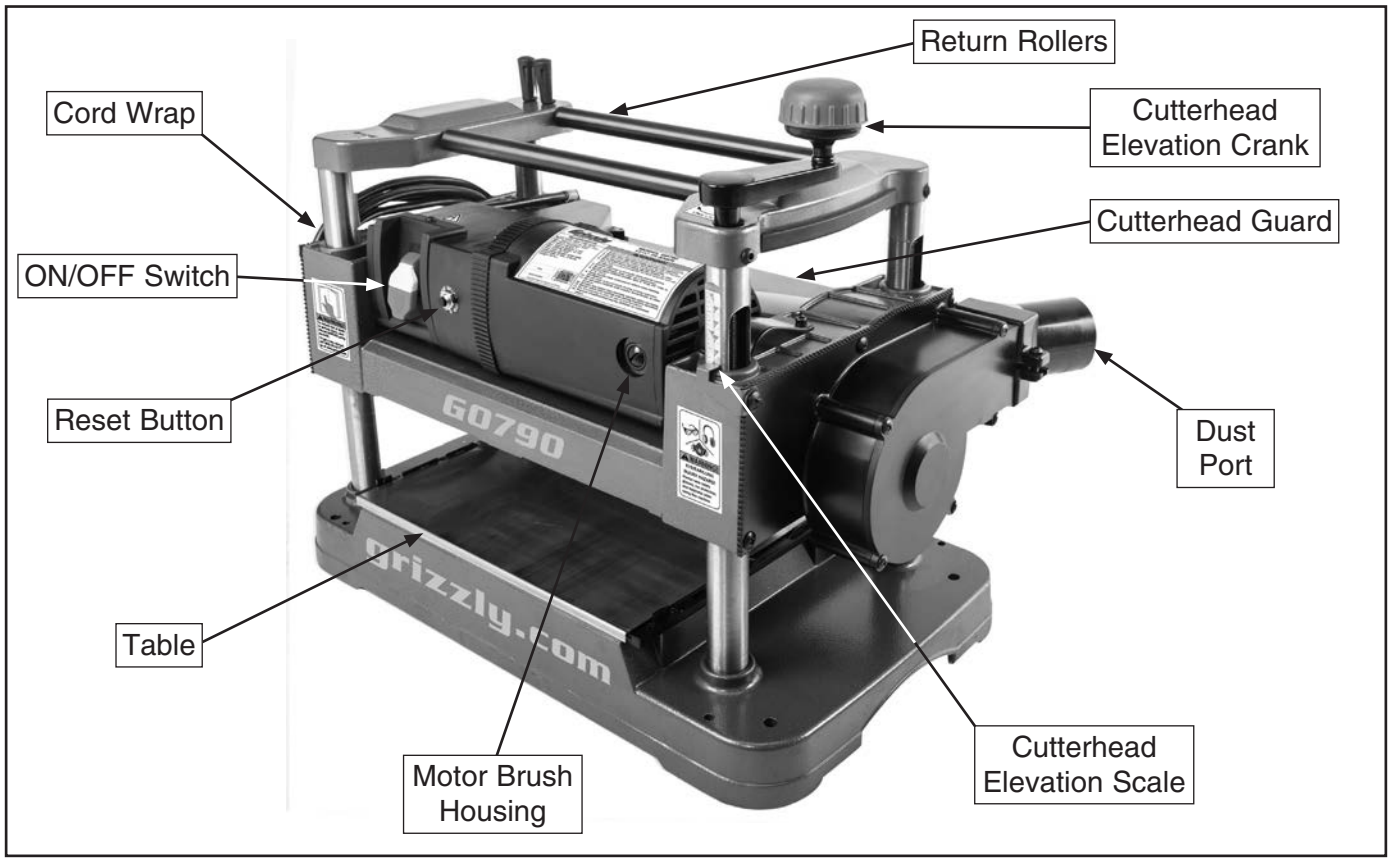
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at **www.grizzly.com**.

Alternatively, you can call our Technical Support for help. Before calling, make sure you write down the **Manufacture Date** and **Serial Number** from the machine ID label (see below). This information is required for us to provide proper tech support, and it helps us determine if updated documentation is available for your machine.

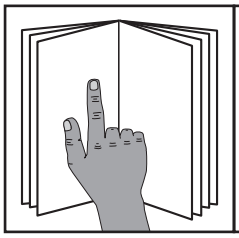


Identification

Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.



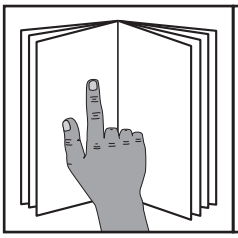
Model G0790 controls and components.



⚠WARNING

To reduce your risk of serious injury, read this entire manual BEFORE using machine.

Controls & Components



⚠WARNING

To reduce your risk of serious injury, read this entire manual BEFORE using machine.

Refer to **Figures 1–2** and the following descriptions to become familiar with the basic controls of this machine.

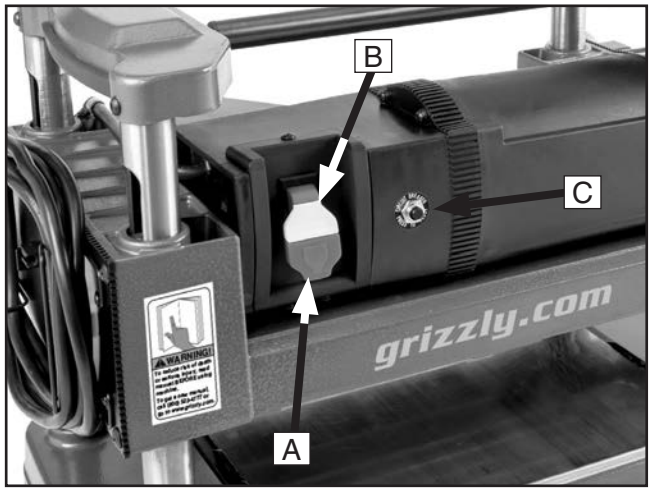


Figure 1. ON/OFF switch and reset button.

A. ON/OFF Switch: Turns motor ***ON*** when flipped up; turns motor ***OFF*** when pressed down.

B. ON/OFF Switch Disabling Key: Disables switch when yellow key is removed so motor cannot start.

C. Reset Button: Allows machine to be restarted after thermal overload protection has tripped the motor. To reset the button, place ON/OFF switch in OFF position, wait a few minutes for motor to cool, then press reset button. If button does not *stay* depressed, allow motor to cool off longer, then try again.

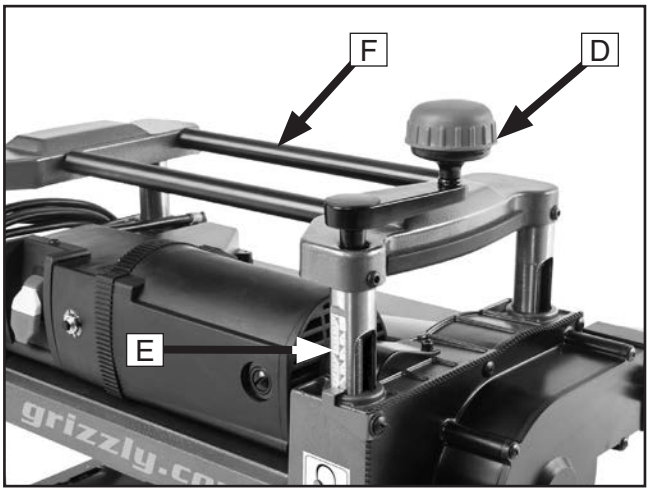


Figure 2. Elevation controls and return rollers.

D. Cutterhead Elevation Crank: Raises and lowers cutterhead. Turning clockwise raises cutterhead; turning counterclockwise lowers it.

E. Cutterhead Elevation Scale: Shows the elevation of the cutterhead above the table. The measurement indicated by the red arrow is the effective thickness of the board *after* planing.

F. Return Rollers: For assistant to slide workpiece back to operator following planing operation.

MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

MODEL G0790 12-1/2" BENCHTOP PLANER WITH DUST COLLECTION

Product Dimensions:

Weight..... 65 lbs.
Width (side-to-side) x Depth (front-to-back) x Height..... 23-1/2 x 19 x 18-1/2 in.
Footprint (Length x Width)..... 22-1/2 x 13 in.

Shipping Dimensions:

Type..... Cardboard Box
Content..... Machine
Weight..... 72 lbs.
Length x Width x Height..... 25 x 16 x 18 in.
Must Ship Upright..... Yes

Electrical:

Power Requirement..... 120V, Single-Phase, 60 Hz
Prewired Voltage..... 120V
Full-Load Current Rating..... 15A
Minimum Circuit Size..... 20A
Connection Type..... Cord & Plug
Power Cord Included..... Yes
Power Cord Length..... 6 ft.
Power Cord Gauge..... 14 AWG
Plug Included..... Yes
Included Plug Type..... 5-15
Switch Type..... Paddle Switch w/Removable Safety Key

Motors:

Universal

Type..... Universal Motor w/Brushes
Horsepower..... 2 HP
Phase..... Single-Phase
Amps..... 15A
Speed..... 17,500 RPM
Power Transfer ..... Belt Drive
Bearings..... Shielded & Permanently Lubricated

Main Specifications:

Main Specifications

Planer Size..... 12.5 in.
Max. Cut Width..... 12-1/2 in.
Min. Stock Thickness..... 5/16 in.
Max. Stock Thickness..... 4-1/2 in.
Number of Cuts Per Inch..... 60
Number of Cuts Per Minute..... 17,500
Cutterhead Speed..... 8750 RPM
Planing Feed Rate..... 26 FPM
Max. Cut Depth Planing Full Width..... 1/32 in.

Cutterhead Info

Cutterhead Type	2 Knife
Cutterhead Diameter	2 in.
Number of Knives	2
Knife Type	HSS, Reversible
Knife Size Length	12-1/2 in.
Knife Size Width	1/2 in.
Knife Size Thickness	1/16 in.

Table Info

Table Bed Size Length	12-3/4 in.
Table Bed Size Width	12-1/2 in.
Table Bed Size Thickness	3-5/8 in.

Construction

Table	Stainless Steel
Body	Aluminum
Cutterhead Assembly	Steel
Infeed Roller	Rubber & Steel
Outfeed Roller	Rubber & Steel
Paint Type/Finish	Powder Coated

Other

Measurement Scale	Inch & Metric
Number of Dust Ports	1
Dust Port Size	2-3/8 in.

Other Specifications:

Country of Origin	China
Warranty	1 Year
Serial Number Location	ID Panel
Sound Rating	95 dB
ISO 9001 Factory	Yes
CSA, ETL, or UL Certified/Listed	Yes (ETL)

Features:

4-1/2" maximum cutting height
Magnetic handles for changing knives
Built-in cord wrap
12-1/2" x 12-3/4" table size

SECTION 1: SAFETY

For Your Own Safety, Read Instruction Manual Before Operating This Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures. Always use common sense and good judgment.

⚠DANGER **Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.**

⚠WARNING **Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

⚠CAUTION **Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.**

NOTICE **This symbol is used to alert the user to useful information about proper operation of the machine.**

Safety Instructions for Machinery

⚠WARNING

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

DISCONNECT POWER FIRST. Always disconnect machine from power supply BEFORE making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are NOT approved safety glasses.

⚠WARNING

WEARING PROPER APPAREL. Do not wear clothing, apparel or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

HAZARDOUS DUST. Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material. Always wear a NIOSH-approved respirator to reduce your risk.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly BEFORE operating machine.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine ***OFF*** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

DAMAGED PARTS. Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace BEFORE operating machine. For your own safety, DO NOT operate machine with damaged parts!

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.

Additional Safety for Planers

⚠WARNING

PLANER INJURY RISKS. Familiarize yourself with the main injury risks associated with planers—always use common sense and good judgement to reduce your risk of injury. **Main injury risks from planers:** amputation/lacerations from contact with the moving cutterhead, entanglement/crushing injuries from getting caught in moving parts, blindness or eye injury from flying wood chips, or impact injuries from workpiece kickback.

KICKBACK. Know how to reduce the risk of kickback and kickback-related injuries. "Kickback" occurs during the operation when the workpiece is ejected from the machine at a high rate of speed. Kickback is commonly caused by poor workpiece selection, unsafe feeding techniques, or improper machine setup/maintenance. Kickback injuries typically occur as follows: (1) operator/bystanders are struck by the workpiece, resulting in impact injuries (i.e., blindness, broken bones, bruises, death); (2) operator's hands are pulled into blade, resulting in amputation or severe lacerations.

REACHING INSIDE PLANER. Never remove guards/covers or reach inside the planer during operation or while connected to power. You could be seriously injured if you accidentally touch the spinning cutterhead or get entangled in moving parts. If a workpiece becomes stuck or sawdust removal is necessary, turn planer ***OFF*** and disconnect power before clearing.

DULL/DAMAGED KNIVES/INSERTS. Only use sharp, undamaged knives/inserts. Dull or damaged knives/inserts increase the risk of kickback.

INSPECTING STOCK. To reduce the risk of kickback injuries or machine damage, thoroughly inspect and prepare the workpiece before cutting. Verify workpiece is free of nails, staples, loose knots or foreign material. Workpieces with minor warping should be jointed first or planed with the cupped side facing the infeed table.

BODY PLACEMENT. Stand to one side of planer during the entire operation to avoid getting hit if kickback occurs.

GRAIN DIRECTION. Planing across the grain is hard on the planer and may cause kickback. Plane in the same direction or at a slight angle with the wood grain.

PLANING CORRECT MATERIAL. Only plane natural wood stock with this planer. DO NOT plane MDF, OSB, plywood, laminates or other synthetic materials that can break up inside the planer and be ejected towards the operator.

LOOKING INSIDE PLANER. Wood chips fly around inside the planer at a high rate of speed during operation. To avoid injury from flying material, DO NOT look inside planer during operation.

CUTTING LIMITATIONS. To reduce the risk of kickback hazards or damage to the machine, do not exceed the maximum depth of cut or minimum board length and thickness found in the **Data Sheet**. Only feed one board at a time.

INFEED ROLLER CLEARANCE. The infeed roller is designed to pull material into the spinning cutterhead. To reduce the risk of entanglement, keep hands, clothing, jewelry, and long hair away from the infeed roller during operation.

FEED WORKPIECE PROPERLY. To reduce the risk of kickback, never start planer with workpiece touching cutterhead. Allow cutterhead to reach full speed before feeding, and do not change feed speed during cutting operation.

WORKPIECE SUPPORT. To reduce the risk of kickback, always make sure workpiece can move completely across table without rocking or tipping. Use auxiliary support stands for long stock.

SECURE KNIVES/INSERTS. Loose knives or improperly set inserts can become dangerous projectiles or cause machine damage. Always verify knives/inserts are secure and properly adjusted before operation.

SECTION 2: POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with all applicable codes and standards.

⚠WARNING

Electrocution, fire, or equipment damage may occur if machine is not correctly grounded and connected to the power supply.

Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Full-Load Current Rating at 120V ..... 15 Amps

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the specified circuit requirements.

⚠WARNING

Serious injury could occur if you connect machine to power before completing setup process. DO NOT connect to power until instructed later in this manual.

Circuit Requirements

This machine is prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage 110V, 115V, 120V
Cycle ..... 60 Hz
Phase ..... Single-Phase
Power Supply Circuit ..... 20 Amps

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

⚠CAUTION

For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

Note: *Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.*

Grounding & Plug Requirements

This machine MUST be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

This machine is equipped with a power cord that has an equipment-grounding wire and a grounding plug. Only insert plug into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances. DO NOT modify the provided plug!

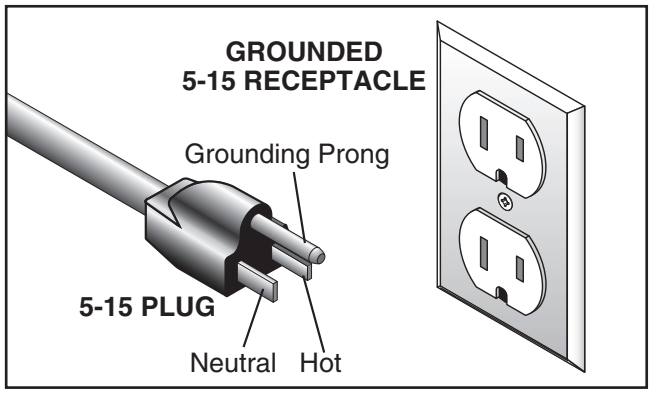
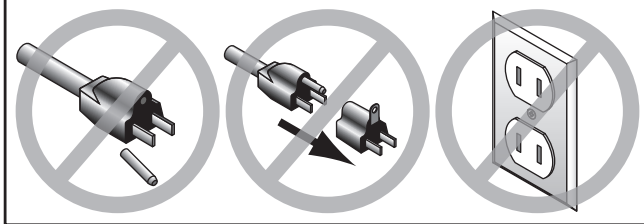


Figure 3. Typical 5-15 plug and receptacle.

⚠CAUTION



SHOCK HAZARD!

Two-prong outlets do not meet the grounding requirements for this machine. Do not modify or use an adapter on the plug provided—if it will not fit the outlet, have a qualified electrician install the proper outlet with a verified ground.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

Minimum Gauge Size .....12 AWG
Maximum Length (Shorter is Better).....50 ft.

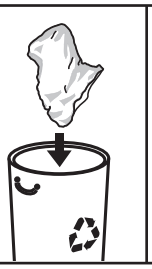
SECTION 3: SETUP

Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover any damage, *please call us immediately at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.



⚠WARNING

SUFFOCATION HAZARD!

Keep children and pets away from plastic bags or packing materials shipped with this machine. Discard immediately.

Needed for Setup

The following are needed to complete the setup process, but are not included with your machine.

Description	Qty
• Safety Glasses	1
• Cleaner/Degreaser	As Needed
• Disposable Shop Rags	As Needed
• Screwdriver Phillips #2	1
• Dust Collection System	1

Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

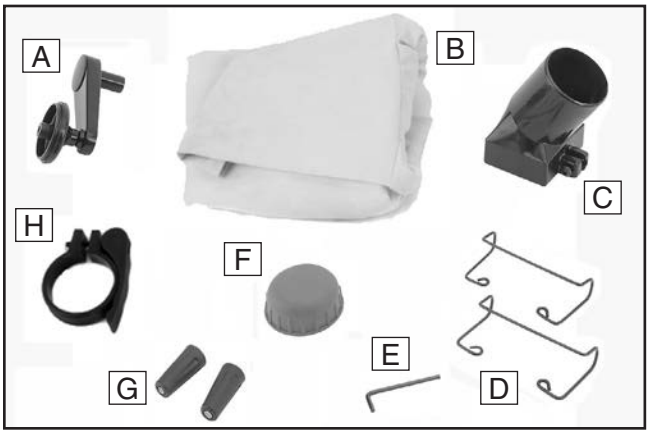


Figure 4. Model G0790 inventory.

Box 1 (Figure 4)	Qty
A. Cutterhead Elevation Crank	1
B. Dust Bag	1
C. Dust Port 2⅜"	1
D. Cord Wraps	2
E. Hex Wrench 4mm	1
F. Cutterhead Elevation Crank Knob	1
G. Knife Changing Magnets	2
H. Dust Bag Clamp	1
I. Hardware (not shown)	1
—M4-.7 x 10 Phillips Head Screws	4
—M5-.8 x 25 Button Head Cap Screw	1
—Flat Washer 5mm	1

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage. This rust preventative works extremely well, but it will take a little time to clean.

Be patient and do a thorough job cleaning your machine. The time you spend doing this now will give you a better appreciation for the proper care of your machine's unpainted surfaces.

There are many ways to remove this rust preventative, but the following steps work well in a wide variety of situations. Always follow the manufacturer's instructions with any cleaning product you use and make sure you work in a well-ventilated area to minimize exposure to toxic fumes.

Before cleaning, gather the following:
- Disposable rags
- Cleaner/degreaser (WD•40 works well)
- Safety glasses & disposable gloves
- Plastic paint scraper (optional)

Basic steps for removing rust preventative:

1. Put on safety glasses.

2. Coat the rust preventative with a liberal amount of cleaner/degreaser, then let it soak for 5–10 minutes.

3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily. If you have a plastic paint scraper, scrape off as much as you can first, then wipe off the rest with the rag.

4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.

NOTICE

Avoid chlorine-based solvents, such as acetone or brake parts cleaner, that may damage painted surfaces.

Site Considerations

Workbench Load

Refer to the **Machine Data Sheet** for the weight and footprint specifications of your machine. Some workbenches may require additional reinforcement to support the weight of the machine and workpiece materials.

Placement Location

Consider anticipated workpiece sizes and additional space needed for auxiliary stands, work tables, or other machinery when establishing a location for this machine in the shop. Below is the minimum amount of space needed for the machine.

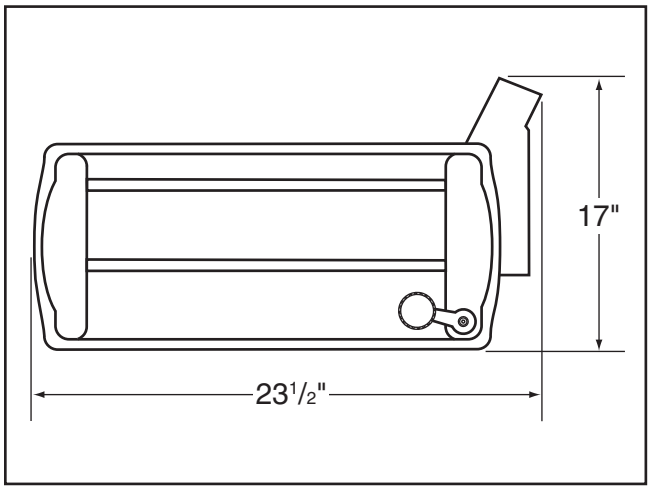
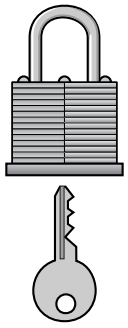


Figure 5. Minimum working clearances.



CAUTION

Children and visitors may be seriously injured if unsupervised around this machine. Lock entrances to the shop or disable start switch or power connection to prevent unsupervised use.

Bench Mounting

Number of Mounting Holes 4
Dia. of Mounting Hardware Needed ..... 5/16"

The base of this machine has mounting holes that allow it to be fastened to a workbench or other mounting surface to prevent it from moving during operation and causing accidental injury or damage.

The strongest mounting option is a "Through Mount" (see example below) where holes are drilled all the way through the workbench—and hex bolts, washers, and hex nuts are used to secure the machine in place.

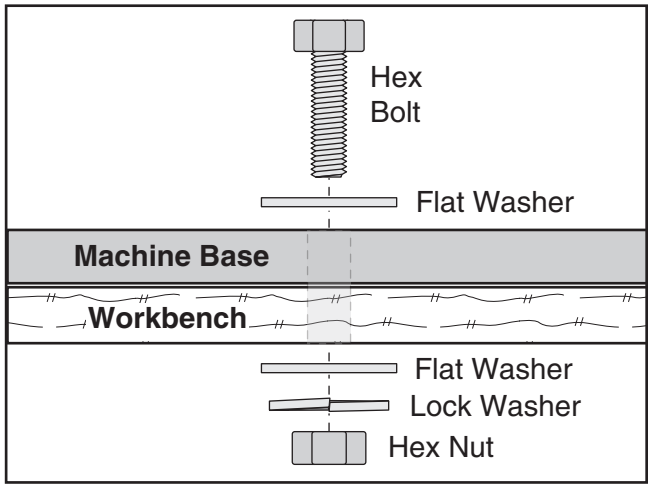


Figure 6. Typical "Through Mount" setup.

Another option is a "Direct Mount" (see example below) where the machine is secured directly to the workbench with lag screws and washers.

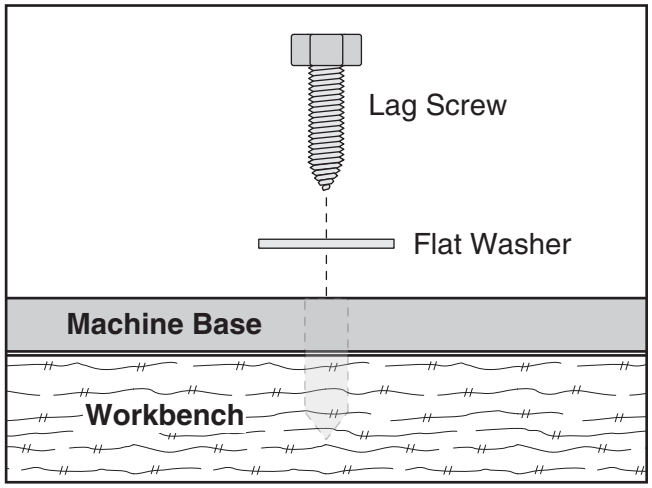


Figure 7. Typical "Direct Mount" setup.

Assembly

The cutterhead elevation crank, cord wraps, and dust port must be installed in order to operate the planer.

To assemble planer loose parts:

1. Assemble cutterhead elevation crank by snapping knob onto crank handle.

2. Remove black plastic lid from crank handle.

3. Align flat portion *inside* crank handle bore with flat portion on elevation shaft, then place crank assembly on elevation shaft.

4. Thread M5-.8 x 25 button head cap screw and 5mm flat washer through crank (see **Figure 8**) and into shaft. Tighten with 4mm hex wrench. Do not over-tighten.

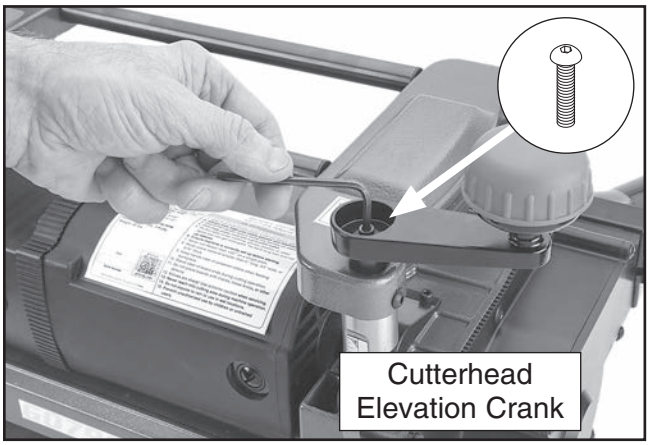


Figure 8. Installing cutterhead elevation crank.

5. Re-install black plastic lid.

6. Position (2) cord wraps over pre-drilled holes in planer cabinet (see **Figure 9**), and secure with (4) M4-.7 x 10 Phillips head screws.

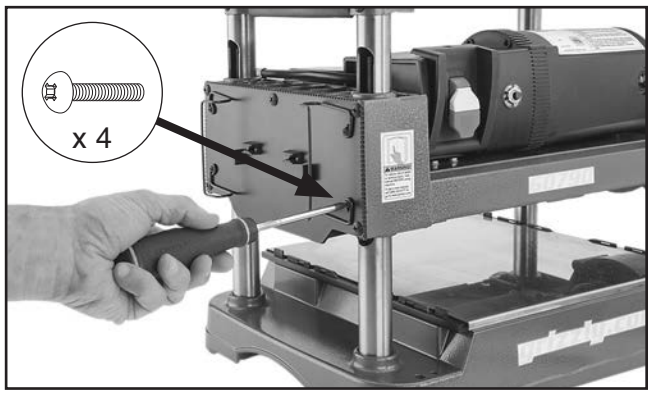


Figure 9. Cord wraps installed with #2 Phillips head screwdriver.

7. Slide dust port onto fan housing (see **Figure 10**) and tighten pre-installed button head cap screw with 4mm hex wrench.

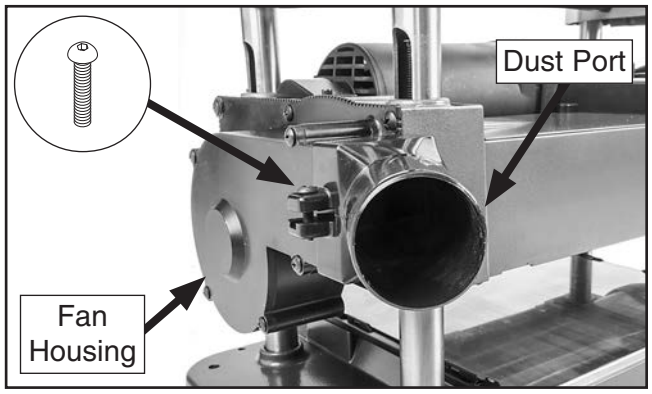


Figure 10. Dust port installed on fan housing.

8. Slide dust hose clamp over dust bag, insert bag and clamp over dust port (see **Figure 11**), and secure with handle.

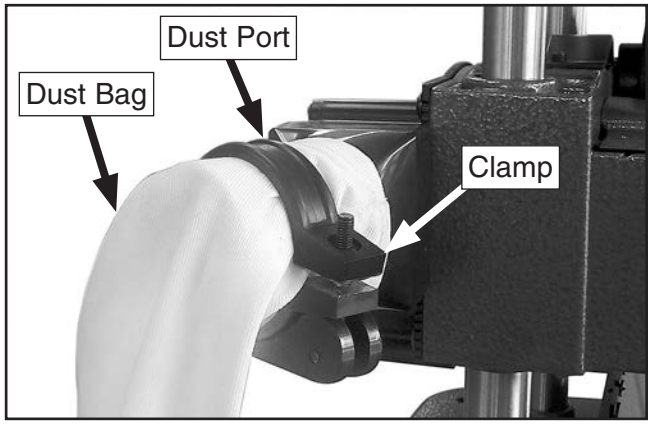


Figure 11. Dust bag installed on port and secured by clamp.

Dust Collection

⚠CAUTION

This machine creates substantial amounts of dust during operation. Breathing airborne dust on a regular basis can result in permanent respiratory illness. Reduce your risk by wearing a respirator and capturing the dust with a dust collection system.

Recommended CFM at Dust Port: 250 CFM

Do not confuse this CFM recommendation with the rating of the dust collector. To determine the CFM at the dust port, you must consider these variables: (1) CFM rating of the dust collector, (2) hose type and length between the dust collector and the machine, (3) number of branches or wyes, and (4) amount of other open lines throughout the system. Explaining how to calculate these variables is beyond the scope of this manual. Consult an expert or purchase a good dust collection "how-to" book.

To connect a dust collection hose:

1. If installed, remove dust bag and clamp from dust port (see **Figure 11**).

2. Fit 2½" dust hose over dust port and secure with hose clamp.

3. Tug hose to make sure it does not come off. **Note:** *A tight fit is necessary for proper performance.*

Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning properly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

The test run consists of verifying the following: 1) The motor powers up and runs correctly, and 2) the safety disabling mechanism on the switch works correctly.

⚠WARNING

Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, machine until the information is understood.

⚠WARNING

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

To test run machine:

1. Make sure you have read safety instructions at beginning of manual and that machine is set up properly.

2. Make sure all tools and objects used during setup are cleared away from machine.

3. Connect machine to power source.

4. Turn machine ***ON***, verify motor operation, then turn machine ***OFF***. Motor should run smoothly and without unusual problems or noises.

5. Remove switch disabling key, as shown in **Figure 12**.

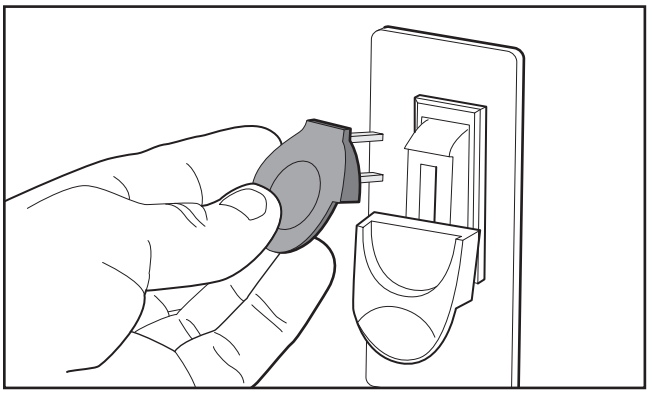


Figure 12. Removing key from paddle switch to disable switch and prevent unauthorized use.

6. Try to start machine with paddle switch.

   — If machine does not start, switch disabling feature is working as designed.

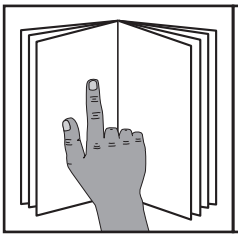
   — If machine starts, immediately stop machine. The switch disabling feature is not working correctly. This safety feature must work properly before proceeding with regular operations. Call Tech Support for help.

SECTION 4: OPERATIONS

Operation Overview

The purpose of this overview is to provide the novice machine operator with a basic understanding of how the machine is used during operation, so the machine controls/components discussed later in this manual are easier to understand.

Due to the generic nature of this overview, it is **not** intended to be an instructional guide. To learn more about specific operations, read this entire manual and seek additional training from experienced machine operators, and do additional research outside of this manual by reading "how-to" books, trade magazines, or websites.

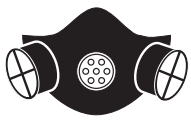


⚠WARNING

To reduce your risk of serious injury, read this entire manual BEFORE using machine.

⚠WARNING

Eye injuries, respiratory problems, or hearing loss can occur while operating this tool. Wear personal protective equipment to reduce your risk from these hazards.



NOTICE

If you are not experienced with this type of machine, WE STRONGLY RECOMMEND that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

To complete a typical operation, the operator does the following:

1. Examines workpiece to make sure it is suitable for planing.
2. Puts on safety glasses or face shield, a respirator, and ear protection.
3. If workpiece is bowed, operator surface planes workpiece on a jointer until one side is flat. Doing so ensures that it sits solidly on planer table during operation.
4. Places workpiece on table with flat side down. Positions front edge of workpiece far enough under cutterhead assembly to set depth of cut using cutterhead elevation scale (see **Depth of Cut** on **Page 20**).
5. Correctly adjusts cutterhead height to workpiece thickness.
6. When all safety precautions have been taken, turns planer ***ON***.
7. Stands to one side of planer path to reduce risk of kickback injuries, then, with flat surface of workpiece facing down, feeds workpiece into planer until infeed roller grabs it.
8. Once workpiece is clear of outfeed roller, operator measures workpiece thickness. If further planing is required, operator adjusts cutterhead height, then feed workpiece into front of planer again.
9. Operator continues process until desired thickness is achieved, then turns machine ***OFF***.

Workpiece Inspection

Some workpieces are not safe to use or may require modification before they are. **Before cutting, inspect all workpieces for the following:**

- **Material Type:** This machine is only intended for workpieces of natural wood fiber Attempting to use workpieces of any other material that may break apart during operation could lead to serious personal injury and property damage.

- **Foreign Objects:** Inspect lumber for defects and foreign objects (nails, staples, imbedded gravel, etc,). If you have any question about the quality of your lumber, DO NOT use it. Remember, wood stacked on a concrete floor can have small pieces of stone or concrete pressed into the surface.

- **Large/Loose Knots:** Loose knots can become dislodged during operation. Large knots can cause kickback and machine damage. Always use workpieces that do not have large/loose knots.

- **Wet or "Green" Stock:** Avoid using wood with a high water content. Wood with more than 20% moisture content or wood exposed to excessive moisture (such as rain or snow), will cut poorly and cause excessive wear to the machine. Excess moisture can also hasten rust and corrosion of the machine and/or individual components.

- **Excessive Warping:** Workpieces with excessive cupping, bowing, or twisting are dangerous to cut because they are unstable and often unpredictable when being cut. DO NOT use workpieces with these characteristics!

- **Minor Cupping:** Workpieces with slight cupping can be safely supported if the cupped side is facing the table. On the contrary, a workpiece supported on the bowed side will rock during operation and could cause severe injury from kickback.

Wood Types

The species of wood, as well as its condition, greatly affects the depth of cut the planer can effectively take with each pass.

The chart in the figure below shows the Janka Hardness Rating for a number of commonly used species. The larger the number, the harder the workpiece, and the less material should be removed in any one pass for good results.

Note: *The Janka Hardness Rating is expressed in pounds of force required to embed a 0.444" steel ball into the surface of the wood to a depth equal to half the ball's diameter.*

Species	Janka Hardness
Ebony	3220
Red Mahogany	2697
Rosewood	1780
Red Pine	1630
Sugar Maple	1450
White Oak	1360
White Ash	1320
American Beech	1300
Red Oak	1290
Black Walnut	1010
Teak	1000
Black Cherry	950
Cedar	900
Sycamore	770
Douglas Fir	660
Chestnut	540
Hemlock	500
White Pin	420
Basswood	410
Eastern White Pine	380
Balsa	100

Figure 13. Janka Hardness Rating for some common wood species.

Planing Tips

- Inspect your lumber for twisting or cupping, and surface one face on a jointer if necessary before planing workpiece.
- Scrape off all glue when planing glued-up panels. Dried glue can quickly dull knives.
- DO NOT plane more than one piece at a time.
- Never remove more than the recommended amount of material on each pass. Only remove a small amount of material on each pass when planing wide or dense stock.
- Support the workpiece on both ends. Get assistance from another person if you are planing long lumber, or use roller stands to support the workpiece.
- Measure the workpiece thickness with calipers to get exact results.
- Carefully inspect all stock to make sure it is free of large knots or foreign objects that may damage your knives, cause kickback, or be ejected from the planer.
- When possible, plane equal amounts on each side of the board to reduce the chance of twisting or cupping.
- Use the entire width of the planer to wear knives evenly. With narrow workpieces, alternate between far left, far right, and the middle of the table. Your knives will remain sharp much longer.
- To avoid "chip marks," always plane WITH the grain direction of the wood. Never plain cross-grain or end-grain.
- Plane ONLY natural wood fiber. Do not plane wood composites or other materials that could break up in the planer and cause operator injury or damage to planer.
- Always true cupped or warped stock on a jointer before planing.

Cutting Problems

Below is a list of wood characteristics you may encounter when planing. The following descriptions of defects will give you some possible answers to problems you may encounter while planing different materials. Possible solutions follow the descriptions.

Chipped Grain

Problem: Usually a result of cutting against the grain, planing lumber with knots or excessive amount of cross grain, or using dull knives.

Solution: Decrease the depth of cut. Inspect your lumber and determine if its grain pattern is causing the problem. If the lumber does not show substantial crossgrain, inspect your knives.

Fuzzy Grain

Problem: Usually caused by surfacing lumber with too high of a moisture content. Sometimes fuzzy grain is an unavoidable characteristic of some woods, such as basswood. Fuzzy grain can also be caused by dull knives.

Solution: Check the lumber with a moisture meter. If moisture is greater than 20%, sticker the lumber and allow it to dry. Otherwise, inspect the knife condition.

Snipe

Problem: Occurs when board ends have more material removed than the rest of the board. Usually caused when the workpiece is not properly supported as it goes through the machine. In many cases, however, a small amount of snipe is inevitable.

Solution: The best way to deal with snipe is by planing lumber longer than your intended work length and then cutting off the excess after planing is completed.

Pitch & Glue Build-up

Problem: Glue and resin buildup on the rollers and cutterhead will cause overheating by decreasing cutting sharpness while increasing drag in the feed mechanism. The result can include scorched lumber as well as uneven knife marks and chatter.

Solution: Clean the rollers and cutterhead.

Chip Marks or Indentations

Problem: Chip indentation or chip bruising is the result of wood chips not being thrown away from the cutterhead and out of the machine. Instead they are carried around the cutterhead, deposited on the planed surface and crushed by the outfeed roller. Chip indentations can be caused by a number of reasons, some of which are:

- The type of lumber being planed. Certain species have a tendency to chip bruise.
- A high moisture content (over 20%) or surface moisture. Typically found in air-dried stock where the surface is dry but the inside needs a longer time to season.
- Dull knives.
- Too much material being removed in one pass.

Solution:

- Lumber must be completely dry, preferably kiln-dried (KD). Air-dried (AD) lumber must be seasoned properly and have no surface moisture. DO NOT surface partially-air-dried (PAD) lumber.
- Make sure planer knives are sharp.
- Reduce depth of cut.

Depth of Cut

The planing depth on the Model G0790 is controlled by the cutterhead elevation crank on top of the planer. Turning the crank clockwise raises the cutterhead; turning it counterclockwise lowers the cutterhead.

Elevation Crank

The elevation crank provides a simple and accurate method for producing cuts of consistent depth on multiple passes.

The pitch of the elevation leadscrew is 16 TPI (threads per inch), meaning that every turn of the crank will move the cutterhead 1/16". Using this as a base, you can make passes with a depth of cut of 1/64", 1/32", 3/64" and 1/16" by turning the crank 1/4 turn, 1/2 turn, 3/4 turn, and one full turn, respectively (see **Figure 14**).

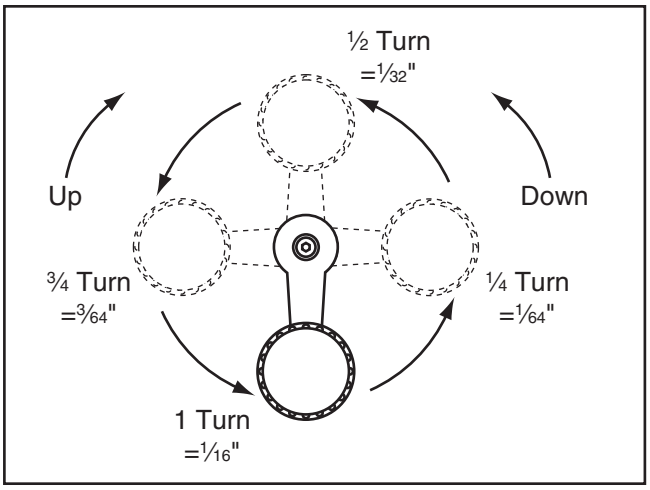


Figure 14. Crank elevation increments.

Note: *Any time you switch directions with the cutterhead elevation crank, there will be a small amount of backlash—so the first turn of the crank after switching directions will be slightly less than 1/16". However, as long as you move the crank in the same direction during the operation, backlash will not be a factor.*

Although the correct depth of cut varies according to wood hardness and workpiece width, we recommend a maximum depth of cut no more than 1/32". A series of light cuts will give better results and put less stress on the planer than trying to take off too much material in a single pass.

Elevation Scale

The depth of cut is read directly from the elevation scale (see **Figure 15**) on the righthand column at the front of the machine. The measurement indicated by the red arrow is the effective thickness of the board *after* planing.

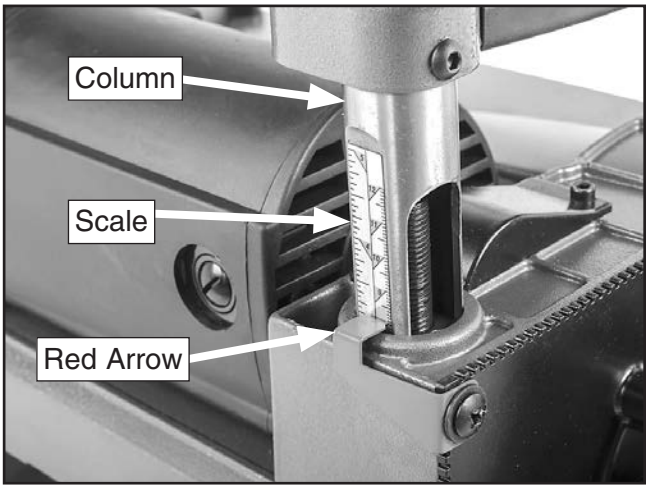


Figure 15. Positioning elevation scale.

Example: If you need to plane a board down to 1", simply make multiple passes (no greater than the maximum depth of cut) until the cutterhead elevation scale reads 1". A final pass at this setting will create a 1" thick workpiece.

Note: *The cutterhead elevation scale does not provide a precise measurement and should only be used for approximate measurements. If precise workpiece thicknesses are needed, use calipers to ensure your workpieces meet your standards.*

Feeding Workpiece

The feed rate on this planer is automatically set at 26 FPM. Infeed and outfeed rollers move the workpiece through the planer while keeping it flat and providing a consistent rate of movement.

To feed workpiece into planer:

1. Place workpiece on table so it is perpendicular to cutterhead, with side to be planed facing *up* toward cutterhead.

   Note: *Boards more than 24" long should be supported on both sides of planer.*

2. Lower cutterhead until depth bar (see **Figure 16**) just touches workpiece.

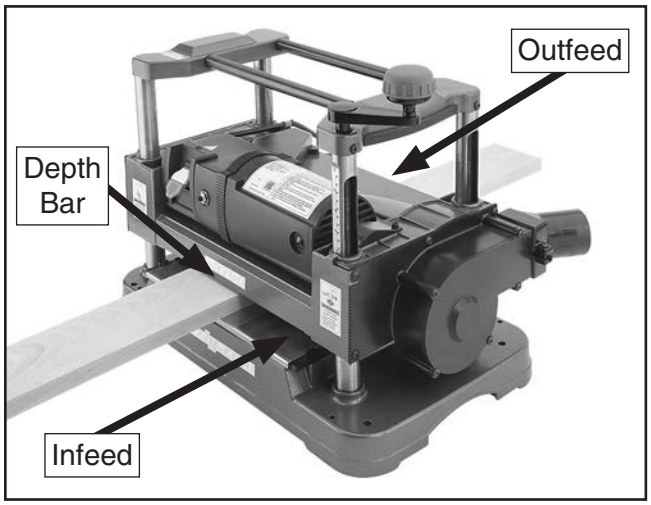


Figure 16. Basic planing operation setup.

Note: *Any time you switch directions with cutterhead elevation handle, there will be a small amount of backlash—so first crank of handle after switching directions will be slightly less than 1/16". However, as long as you move handle in same direction during operation, backlash will not be a factor.*

3. Turn cutterhead elevation crank ¼ turn clockwise to raise cutterhead approximately 1/64". This will set depth of cut to 1/32". Remove workpiece from planer.

4. Turn planer ***ON***.

5. With flat side of board facing *down* on table, feed workpiece into front of planer, making sure not to stand directly in front or behind workpiece to reduce the risk of a kickback injury.

— If cut is too deep and bogs down planer, turn planer ***OFF*** immediately, allow it to come to a complete stop, raise cutterhead, remove workpiece, reduce depth of cut, then repeat **Step 5**.

Note: *Infeed and outfeed rollers will control feed rate of workpiece as it passes through planer. Do not push or pull on workpiece.*

6. Once workpiece is clear of outfeed roller, measure workpiece thickness. If further planing is needed, lower cutterhead by turning elevation crank handle ½ turn (1/32"), return the workpiece to the infeed table, then continue.

7. Continue this process until desired thickness is reached. Depth of cut indicator scale shows approximate thickness of workpiece after it has been cut. Use this indicator to judge when thickness is approximately correct. For more precise applications, use a caliper to measure workpiece thickness.

SECTION 5: ACCESSORIES

⚠WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

Basic Eye Protection

T20501—Face Shield Crown Protector 4"
T20502—Face Shield Crown Protector 7"
T20503—Face Shield Window
T20451—"Kirova" Clear Safety Glasses
T20452—"Kirova" Anti-Reflective S. Glasses
H7194—Bifocal Safety Glasses 1.5
H7195—Bifocal Safety Glasses 2.0
H7196—Bifocal Safety Glasses 2.5

Figure 17. Assortment of basic eye protection.

H4978—Deluxe Earmuffs - 27dB
H4979—Twin Cup Hearing Protector - 29dB
T20446— Classic Earplugs, 200 pair - 31dB
Protect yourself comfortably with a pair of cushioned earmuffs. Especially important if you or employees operate for hours at a time.

Figure 18. Our most popular earmuffs.

H2499—Small Half-Mask Respirator
H3631—Medium Half-Mask Respirator
H3632—Large Half-Mask Respirator
H3635—Cartridge Filter Pair P100
Wood dust has been linked to nasal cancer and severe respiratory illnesses. If you work around-dust everyday, a half-mask respirator can be a lifesaver. Also compatible with safety glasses!

Figure 19. Half-mask respirator with disposable cartridge filters.

T26979—3-in-1 Workpiece Support Stand
This 3-in-1 Workpiece Support Stand features a rotating head with steel roller topped with 8 rolling balls. The heavy-duty steel frame has four outrigger legs for stability and an adjustable foot for uneven floors. Height adjusts from 27½" to 43" and supports up to 250 lb. It even folds up for easy storage!

Figure 20. Model T26979 3-in-1 Workpiece Support Stand.

G2857—Thickness Guage
Measure thicknesses and diameters quickly with this handy gauge. Wonderful for thickness planers, wood lathes, and other shop measurements. Measures from 1/16" to 2" in 1/32" increments. Made in the U.S.A.

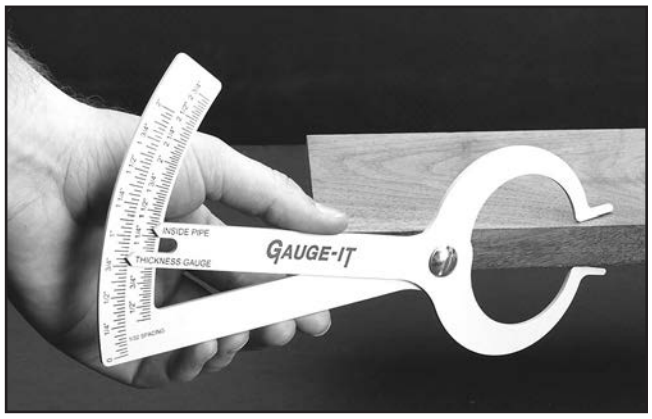


Figure 21. Model G2857 Thickness Gauge.

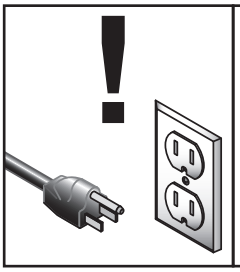
Basic Lubricants
These lubricants reduce sliding friction and hang-ups, repel moisture and dirt, and inhibits rust while preventing resin build-up. They out-performspaste wax and contain no silicone or CFC's.

Figure 22. Model G5563 Slip-It Tool Lube & G4682 Dry Coating Lube.

G0725—6" x 28" Benchtop Jointer
Don't let the size of this benchtop jointer fool you! With its cast iron tables and center-mounted cast iron fence, this 6" Jointer is tough enough to handle big jobs. It also features a 1½ HP motor, 2½" dust port, built-in dust collection system, 45° bevel adjustment, and easy-to-adjust knives. Great for job sites or shops with limited space!

Figure 23. Model G0725 Benchtop Jointer.

SECTION 6: MAINTENANCE



⚠WARNING

To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.

Schedule

For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

Daily Check
- Loose mounting bolts.
- Damaged knives.
- Worn or damaged wires.
- Any other unsafe condition.

Monthly Check
- Clean chains and sprockets of dust, wood chips, and old grease.
- Lightly coat chains and sprockets with automotive bearing grease (see **Page 25**).
- Lubricate column leadscrews with spray lubricant (see **Page 24**).
- Check V-belt for tension, damage, or wear (see **Page 29**).
- Remove cutterhead guard and fan cover (see **Page 27**), and thoroughly clean built-up sawdust and chips.

Cleaning & Protecting

Cleaning the Model G0790 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it.

Lubrication

There are three primary systems that require periodic lubrication: the cutterhead elevation leadscrews, the feed roller chain drive, and the table height chain. Clean the components in the section with an oil/grease solvent cleaner or mineral spirits before applying lubrication.

Elevation Leadscrews

Items Needed	Qty
Type	G4682 Dry Coating Lube
Lubrication Frequency	Monthly

To lubricate elevation leadscrews:

1. DISCONNECT MACHINE FROM POWER!

2. Vacuum chips and dust from leadscrews through open face of all four columns (see **Figure 24**).

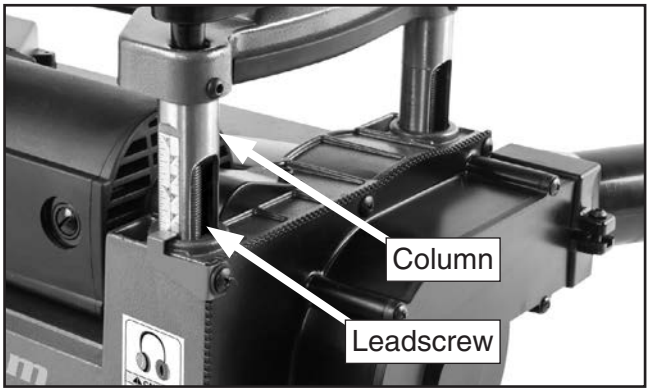


Figure 24. Location of cutterhead elevation leadscrews.

3. Use mineral spirits, stiff brush, and shop rags to remove old lubricant.

4. Spray lubricant onto each leadscrew. Move cutterhead up and down to evenly distribute.

Feed Roller Chain Drive

Items Needed **Qty**
Grease.....T23964 NLGI#2 or Equivalent Grease
Lubrication Frequency.....Monthly

To lubricate feed roller chain drive:

1. DISCONNECT MACHINE FROM POWER!

2. Remove (4) M6-1 x 12 button head cap screws.

3. Remove side cover to expose chain (see **Figure 25**).

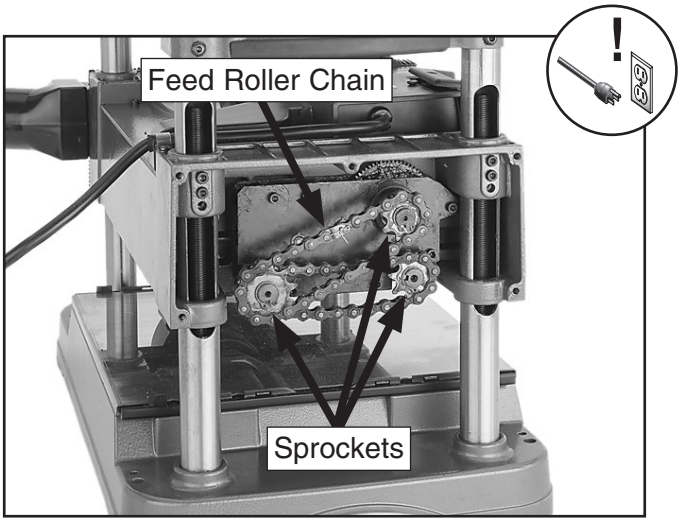


Figure 25. Cutterhead elevation leadscrews and feed roller drive chain exposed for lubricating.

4. Use mineral spirits, stiff brush, and shop rags to clean old grease from chain.

5. Apply light coating of grease to chain linkage and sprockets.

6. Re-install side cover.

Table Height Chain

Items Needed **Qty**
Grease.....T23964 NLGI#2 or Equivalent Grease
Lubrication Frequency.....Monthly

To lubricate table height chain:

1. DISCONNECT MACHINE FROM POWER!

2. Gently tilt machine onto its side (see **Figure 26**) to expose chain.

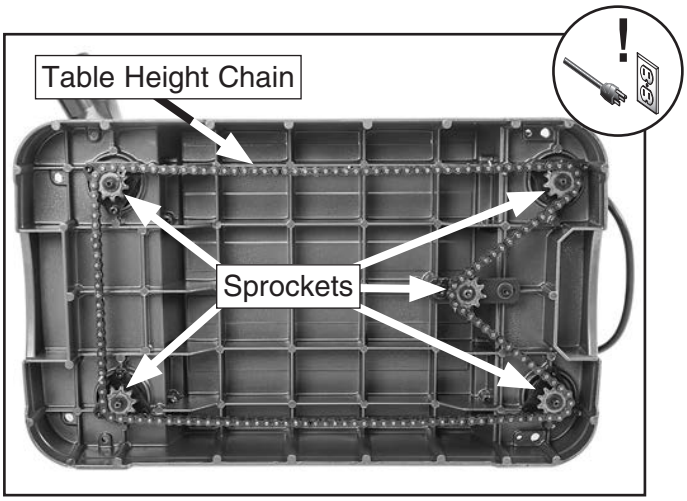


Figure 26. Table height chain and sprockets exposed for lubricating.

3. Use mineral spirits, stiff brush, and shop rags to clean old grease from chain.

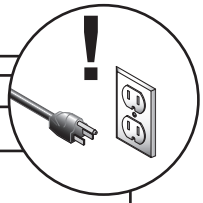
4. Apply light coating of grease to chain linkage and sprockets.

5. Tilt machine back onto its base.

SECTION 7: SERVICE

Review the troubleshooting and procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support. **Note:** *Please gather the serial number and manufacture date of your machine before calling.*

Troubleshooting



Symptom	Possible Cause	Possible Solution
Motor will not run.	1. Switch disabling key removed. 2. No power to planer. 3. Machine circuit tripped. 4. Defective switch or loose wiring. 5. Carbon brushes are at fault.	1. Install disabling key. 2. Check power supply. 3. Turn planer OFF. Reset machine circuit breaker (Page 4). 4. Verify all wire connections on switch/motor are connected and tight. 5. Replace carbon brushes.
Motor overheats or operates at limited RPM.	1. Motor overloaded during operation. 2. Carbon brushes worn or at fault.	1. Reduce cutting load; take lighter cuts. 2. Replace carbon brushes.
Motor stalls or shuts off during a cut.	1. Cut is too deep. 2. Machine circuit breaker tripped. 3. Short circuit in motor or loose connections. 4. Power supply circuit breaker tripped or fuse blown. 5. Carbon brushes worn or at fault.	1. Reduce depth-of-cut. 2. Turn planer OFF. Reset machine circuit breaker (**Page 4**). 3. Repair or replace connections on motor for loose or shorted terminals or worn insulation. 4. Reset or replace fuse. 5. Replace carbon brushes.
Cutterhead slows or squeals when cutting, especially on start-up.	1. Belt worn out. 2. Carbon brushes worn or at fault.	1. Replace belt (**Page 29**). 2. Replace carbon brushes.
Infeed/outfeed rollers not rotating.	1. Chain and sprockets are worn, misadjusted, disconnected, or broken.	1. Adjust chain and sprockets; replace if necessary.
Vibration when running or cutting.	1. Knives are dull. 2. Damaged belt. 3. Loose or damaged cutterhead. 4. Worn cutterhead bearings.	1. Replace knives. 2. Replace belt (**Page 29**). 3. Tighten or replace cutterhead. 4. Check/replace cutterhead bearings.
Boards don't feed properly into machine.	1. Knives are dull. 2. Feed rollers are dirty, worn, loose, or misadjusted.	1. Replace knives (**Page 27**). 2. Clean feed rollers (**Page 31**). Examine for wear, and ensure they are installed securely and properly adjusted.

Machine Operation

Symptom	Possible Cause	Possible Solution
Excessive snipe (gouge at the end of the workpiece that is uneven with the rest of the cut). **Note:** A small amount of snipe is inevitable with all types of planers—the key is to minimize it.	1. Aftermarket outfeed support table/rollers slopes down or is not level with main table. 2. Workpiece not properly supported as it leaves planer.	1. Adjust rear extension wing set screws to make extension level with main table. 2. Use an assistant or roller beds/stands to properly support the workpiece as it leaves the planer.
Consistent chipping pattern.	1. Knots or conflicting grain direction in workpiece. 2. Nicked or chipped knife. 3. Feed rate too fast. 4. Depth of cut too deep.	1. Inspect workpiece for knots and grain direction; use only clean stock (**Page 24**). 2. Sharpen/replace knife (**Page 36**). 3. Reduce feed rate (**Page 25**). 4. Reduce the depth of cut (**Page 26**).

Knife Replacement

⚠CAUTION

The cutterhead knives on Model G0790 are extremely sharp. Accidental contact with knives can result in severe cuts. Take great caution whenever working with or around cutterhead knives. Wear heavy leather gloves to reduce risk of severe cuts.

NOTICE

To maintain accurate and consistent planing results, we do not recommend sharpening knives yourself. Instead, just replace dull knives or have them professionally sharpened.

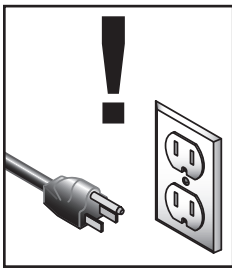
The knives on the Model G0790 Planer are reversible and should always be reversed or replaced as a matched set. To avoid downtime, we recommend having an extra set of knives for your planer. Once the cutterhead, gib, and knives have been inspected and prepared, install the knives.

Before re-installing the knives, the cutterhead, gib and knife must be inspected. Neglecting to inspect these components may result in damage to the planer.

The condition of the knives on the Model G0790 will affect the precision of the cut. During operation, watch for the following signs of dulled knives.

- Raised grain occurs as a result of dull knives hammering at the surface of the wood.
- A "fuzzy" appearance on the surface of the wood occurs as a result of dull knives tearing, rather than cutting the wood fibers.
- Ridges occur as a result of nicks along the knife edge.
- Difficulty feeding the workpiece into the planer.

If any of these signs become apparent during use, the knives should be reversed or replaced.



⚠WARNING

To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.

Tools Needed **Qty**
Hex Wrench 4mm..... 1

Removing Knives

1. DISCONNECT MACHINE FROM POWER!

2. Remove (2) M5-.8 x 10 cap screws from cutterhead guard, then remove guard (see **Figure 27**).

Note: *Cutterhead guard locks in place. After removing cap screws, slide guard right approximately* ⅛" *to release*.

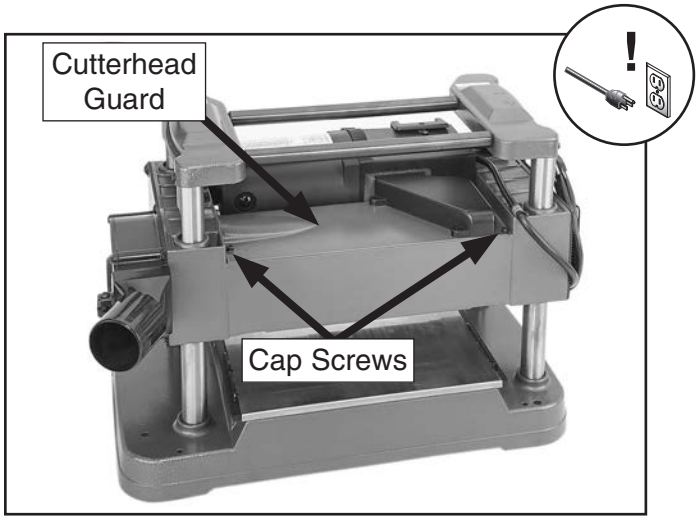


Figure 27. Position of cutterhead guard prior to disassembly.

3. Wearing heavy leather gloves, carefully turn cutterhead until knives are visible (see **Figure 28**).

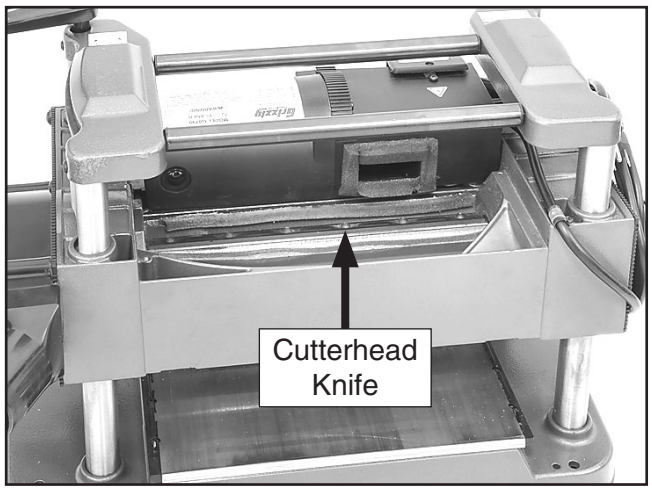


Figure 28. Location of cutterhead knives and cap screws.

4. Remove (6) M6-1 x 16 cap screws from gib using 4mm hex wrench.

5. Use included magnets to remove gib, then knife.

Inspecting Cutterhead, Gib, and Knives

1. DISCONNECT PLANER FROM POWER!

2. Carefully clean the cutterhead with a rag and with a flashlight, inspect the following:

   - Make sure the threaded screw holes do not contain wood material or sawdust.
   - Make sure that the hex socket and the threads of all cap screws are in good condition. Replace if questionable.
   - Make sure any resin or glue buildup on the cutterhead, gib, and knives is removed so the knife and gib will sit flat on the cutterhead.
   - Make sure the knives are free of cracks. If any cracks exist, replace both knives.

Installing Knives

1. DISCONNECT MACHINE FROM POWER!

2. Using magnets, position knife over two pins on cutterhead (see **Figure 29**). Be sure knife is oriented with beveled edge up.

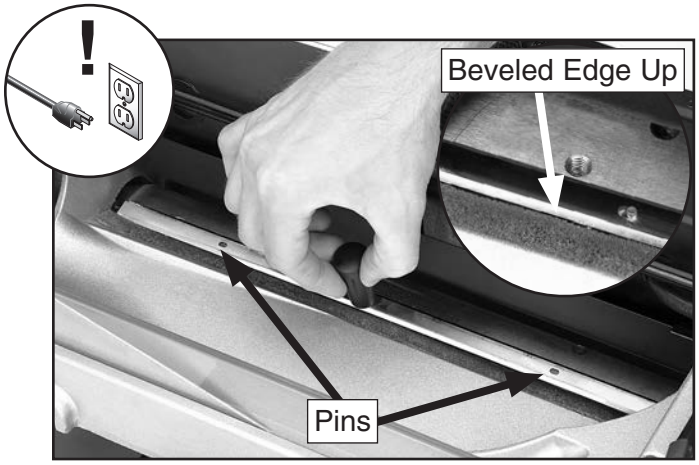


Figure 29. Example of knife installation.

3. Using magnets, place gib over knife. Secure gib with (6) M6-1 x 16 cap screws (see **Figure 30**) removed earlier.

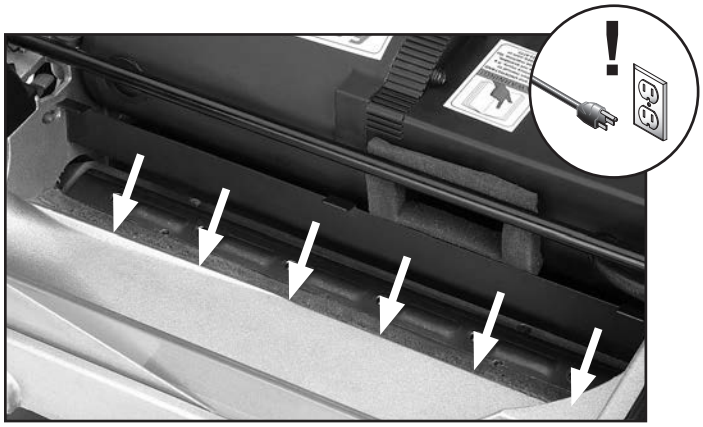


Figure 30. Gib installation.

4. Carefully rotate cutterhead until second knife slot is exposed.

5. Repeat **Steps 2–3** for second knife, then replace knife guard.

Replacing Motor Brushes

This motor is equipped with two long-life carbon brushes. However, brush life expectancy is affected by motor loading. Regularly planing very wide, dense boards or cutting too deeply will reduce brush life.

Check brushes if motor loses power or becomes noisy. Replace the carbon brushes when the motor no longer reaches full power or if brushes measure less than ¼" long (new brushes are ⅝" long).

Tools Needed	Qty
Flat Head Screwdriver #2	1

To replace motor brushes:

1. DISCONNECT MACHINE FROM POWER!

2. Unscrew brush cap and carefully remove brush from motor (see **Figure 31**).

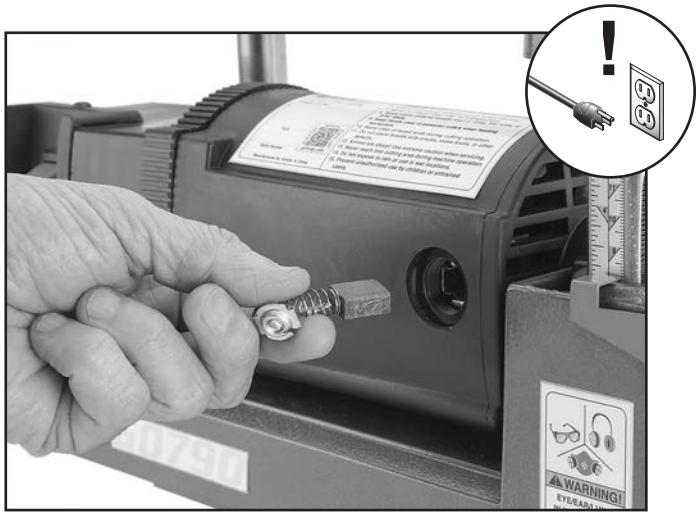


Figure 31. Brush holder location. A second brush is located on other side of motor.

3. Install new brush and re-install brush cap.

4. Repeat **Steps 2–3** to replace motor brush on opposite side of motor housing.

Replacing & Tensioning V-Belt

The cutterhead is driven by a belt that is located on the right-hand side of the motor and cutterhead assembly (when facing the front of the machine). The belt is very durable, but with extended use it may begin to stretch and slip, indicating the need for tightening or replacement.

Tools Needed	Qty
Hex Wrench 4mm	1
Hex Wrench 5mm	1
Phillips Head Screwdriver #2	1

To replace belt:

1. DISCONNECT MACHINE FROM POWER!

2. Slide dust port off fan housing.

3. Remove (5) M5-.8 x 15 tap screws that secure fan housing cover (see **Figure 32**).

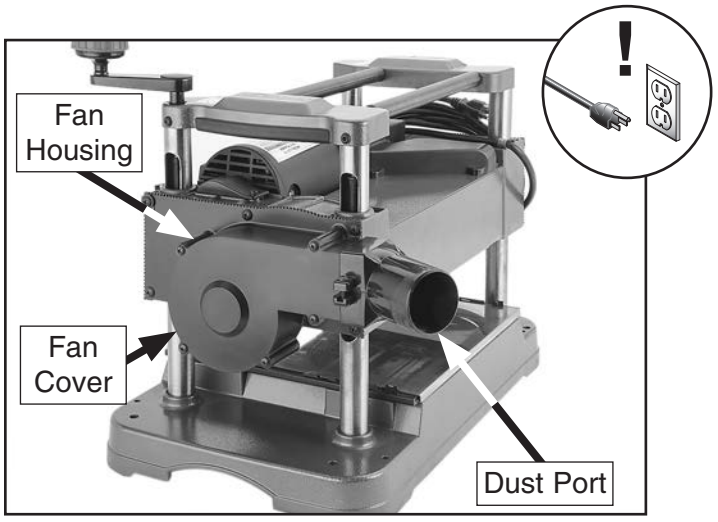


Figure 32. Hardware attaching fan housing.

4. Remove M6-1 x 12 button head cap screw that attaches fan to shaft. This screw has left-hand threads; rotate right to loosen or left to tighten. Slide fan off shaft.

5. Remove (5) M6-1 x 12 Phillips head screws (see **Figure 32**) to remove fan housing and expose V-belt.

6. Remove (2) M5-.8 x 10 cap screws that secure belt guard (see **Figure 33**).

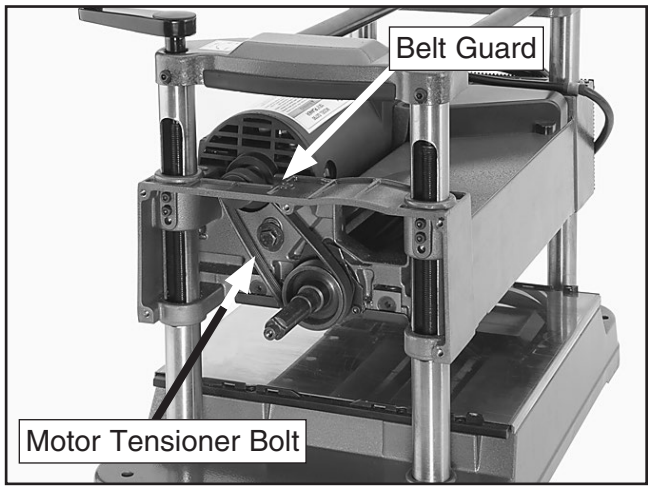


Figure 33. Fan housing removed and V-belt exposed.

7. Loosen motor tensioner bolt (see **Figure 35**) to release tension on V-belt.

8. Remove V-belt by rolling it off motor pulley.

9. Place new V-belt over both pulleys. To tension belt, rotate motor toward front of machine using moderate force. Hold in place and tighten motor tensioner bolt.

Note: *V-belt is correctly tensioned when there is approximately ⅜" deflection when moderate pressure is applied midway between pulleys, as illustrated in* ***Figure*** **34***.*

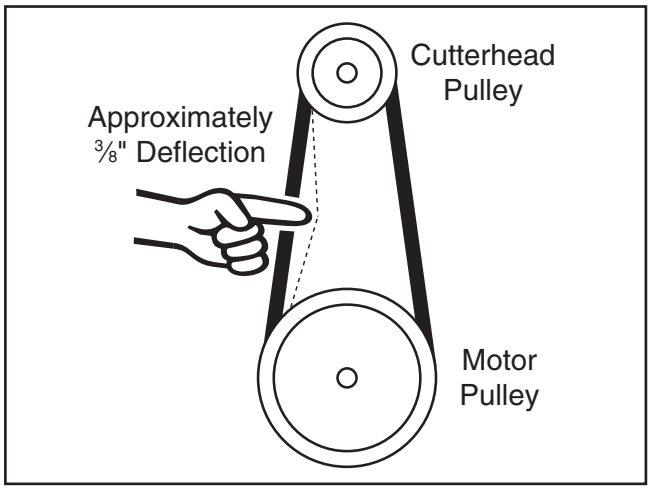


Figure 34. Correct amount of belt deflection.

10. Re-install belt guard, fan housing, fan, and fan cover in reverse order that they were removed.

Scale Calibration

Although correctly set at the factory, the scale can be adjusted for accuracy if it becomes necessary.

Tools Needed	Qty
Phillips Screwdriver #2	1
Scrap Piece of Stock	1
Calipers	1

To reposition scale:

1. Plane scrap piece of stock until it is flat on both sides and has even thickness along its length.

   Note: *Turn scrap board over between each pass to make surfaces parallel.*

2. Use calipers to measure board thickness.

3. If there is a discrepancy between board thickness and reading on elevation scale, loosen the M6-1 x 12 Phillips head screw shown in **Figure 35**, adjust position of red pointer to indicate correct thickness, then re-tighten screw.

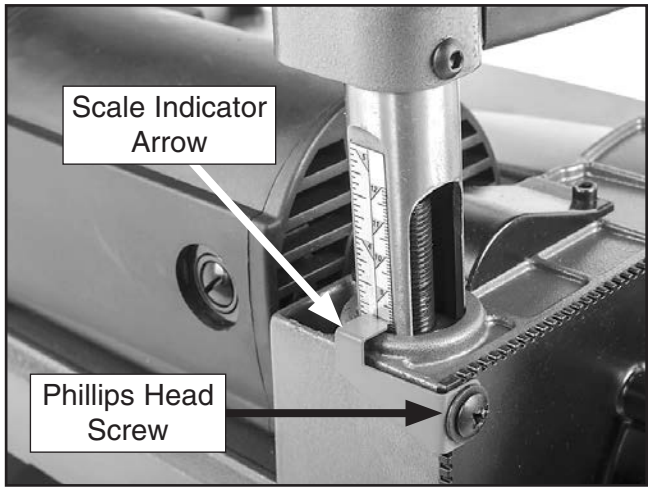


Figure 35. Elevation scale components used to calibrate thickness reading.

Feed Rollers

The feed rollers rotate in bushing blocks that are spring loaded. The feed rollers ride up on the board so that the roller pressure is maintained. If chips or sawdust build up between the bracket and bushing block (see **Figure 36**), the amount of roller vertical travel will be reduced, potentially causing improper feeding of workpiece through the machine.

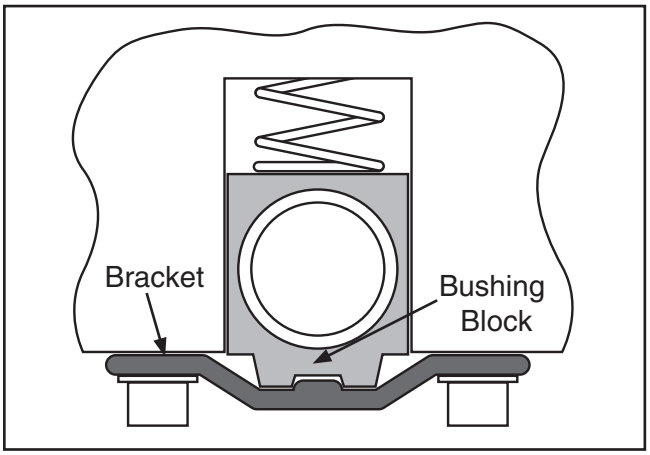


Figure 36. Sawdust can get trapped between the bushing block and the bracket.

Periodically check and clean chips and sawdust from between the bushing blocks and brackets.

Items Needed	Qty
4" Tall Block of Wood	1

To clean feed rollers:

1. DISCONNECT MACHINE FROM POWER!

2. Place a 4" tall block of wood between one feed roller and planer table. Ensure block of wood is not under cutterhead.

3. Lower cutterhead assembly just enough so roller is pushed up against spring and pressure is off of two brackets.

4. Remove any trapped material from between roller assembly and bracket.

Table Height Adjustment

The table and cutterhead are checked for parallelism at the factory. However, over long periods of use, parallelism may be affected. To restore parallelism between the table and the cutterhead, perform the following steps.

Tools Needed **Qty**
Hex Wrench 4mm..... 1

To adjust table height:

1. Plane a test piece of wood. Measure amount of taper from front to back and side to side. Determine which corner(s) of table need to be adjusted.

2. DISCONNECT MACHINE FROM POWER!

3. Gently tilt machine onto its side (see **Figure 37**) to expose table height chain and sprockets.

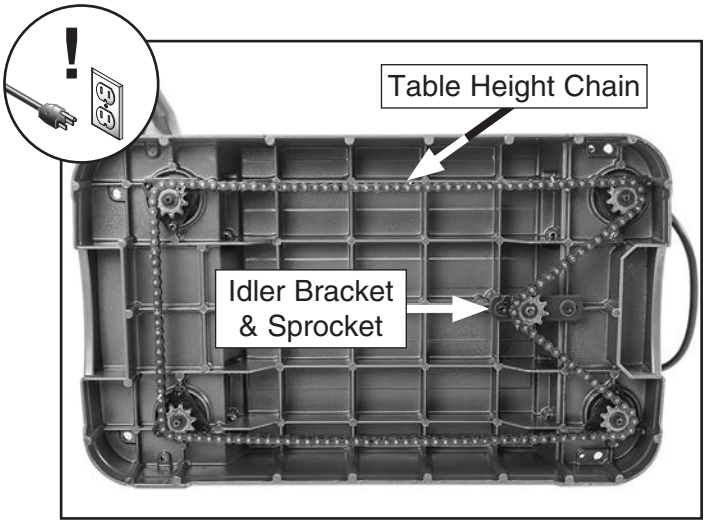


Figure 37. Idler bracket, sprocket, and chain (viewed from underneath planer).

NOTICE

During next step, DO NOT let chain fall off sprockets. It can be very difficult to return chain to proper location on sprockets without changing table adjustments.

4. Loosen (2) M5-.8 x 10 cap screws on idler bracket to loosen chain. Do not remove chain.

   Note: *The goal in the next step is to adjust the height of the table by rotating the leadscrew sprockets at the corners of the base (see **Figure** **38**).*

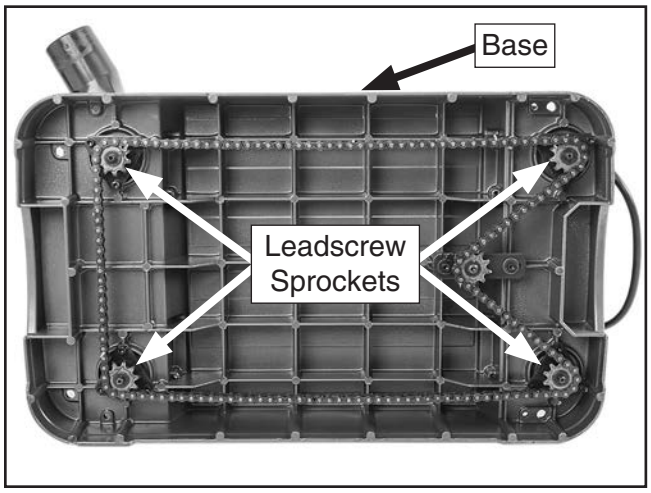


Figure 38. Location of leadscrew sprockets (viewed from underneath planer).

5. Gently lift chain clear of one leadscrew sprocket at a time. Rotating sprocket by one tooth will move that corner of table by approximately 0.006".

6. When satisfied with adjustments, re-tighten idler bracket with cap screws. Set machine back on its base.

7. Perform a test cut to verify parallelism. If cutterhead and table are not parallel, perform **Steps 3–6** again.

SECTION 8: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** *Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.*

⚠WARNING
Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

NOTICE

The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

BLACK	Bk	BLUE	Bl	YELLOW	Yl	LIGHT BLUE	Lb
WHITE	Wt	BROWN	Br	YELLOW GREEN	Yg	BLUE WHITE	Bw
GREEN	Gn	GRAY	Gy	PURPLE	Pu	TURQUOISE	Tu
RED	Rd	ORANGE	Or	PINK	Pk		

Wiring Diagram & Electrical Components

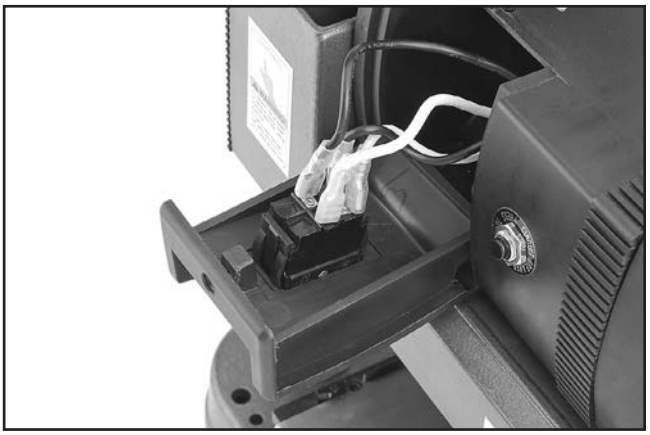
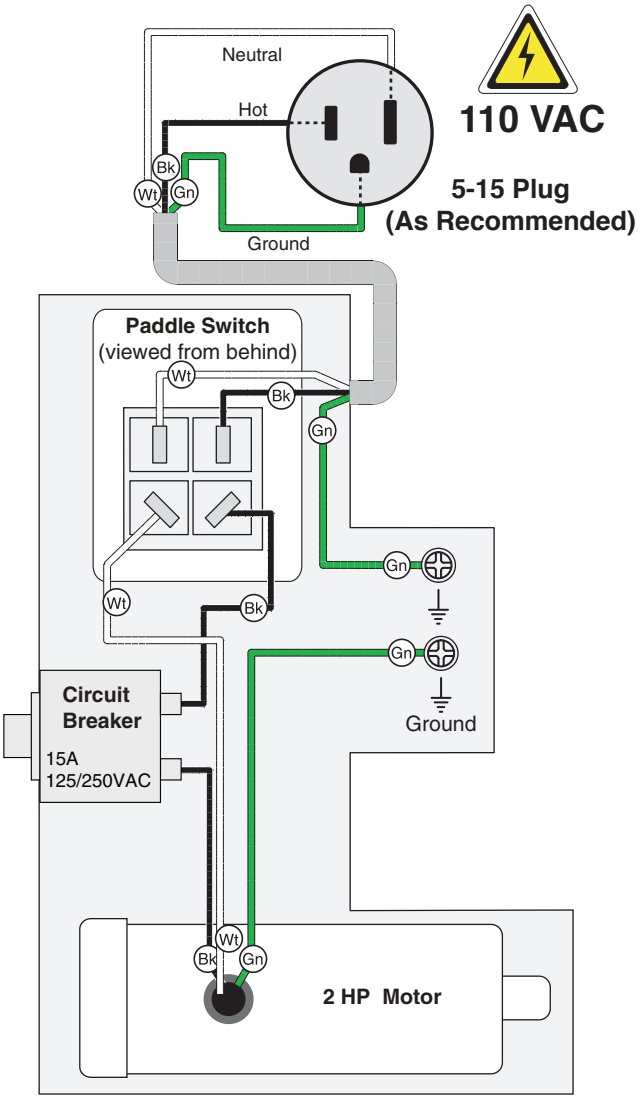


Figure 39. Paddle switch.

Figure 40. Circuit breaker.

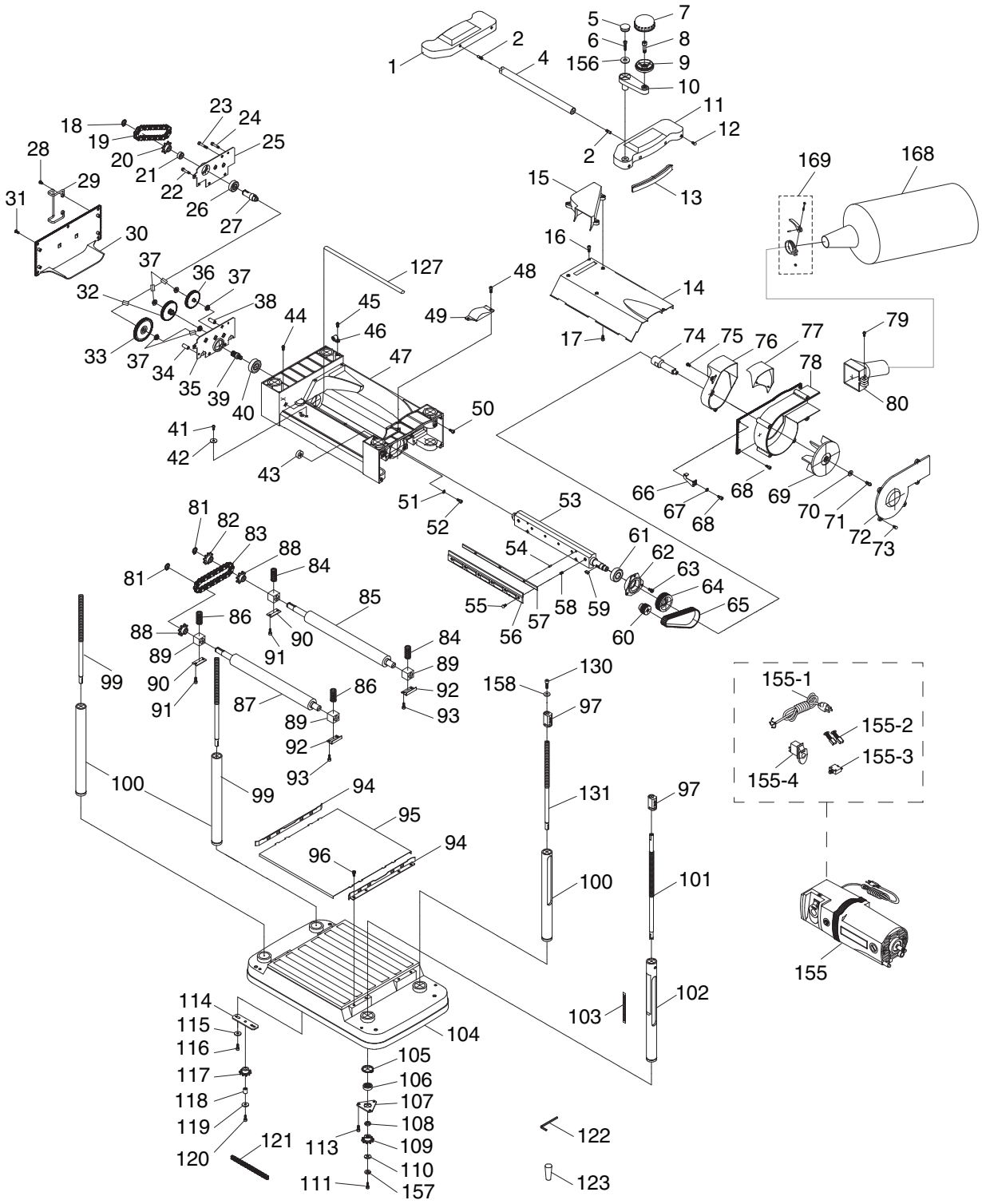
NOTICE

The motor wiring shown here is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.



SECTION 9: PARTS

Main



Main List

REF	PART #	DESCRIPTION
1	P0790001	LEFT CAP
2	P0790002	ROLLER END CAP PIN (PLASTIC)
4	P0790004	ROLLER
5	P0790005	HANDLE CAP
6	P0790006	CAP SCREW M5-.8 X 25
7	P0790007	KNOB CAP
8	P0790008	SHOULDER SCREW M8-1.25 X 7, 29L
9	P0790009	KNOB BASE
10	P0790010	HANDLE
11	P0790011	RIGHT CAP
12	P0790012	BUTTON HD CAP SCR M6-1 X 6
13	P0790013	CARRYING GRIP
14	P0790014	BLADE GUARD
15	P0790015	AIR DUCT
16	P0790016	CAP SCREW M5-.8 X 10
17	P0790017	TAP SCREW M4 X 10
18	P0790018	EXT RETAINING RING 15MM
19	P0790019	CHAIN FOR CUTTERHEAD DRIVE
20	P0790020	SPROCKET 8T
21	P0790021	SPACER
22	P0790022	CAP SCREW M5-.8 X 30
23	P0790023	CAP SCREW M5-.8 X 35
24	P0790024	CAP SCREW M5-.8 X 27
25	P0790025	OUTSIDE GEAR PLATE
26	P0790026	BALL BEARING 6002ZZ
27	P0790027	GEAR SHAFT
28	P0790028	TAP SCREW M4 X 10
29	P0790029	CORD WRAP
30	P0790030	SIDE COVER
31	P0790031	BUTTON HD CAP SCR M6-1 X 12
32	P0790032	DOUBLE GEAR 58T/12T
33	P0790033	GEAR 70T
34	P0790034	SPACER 5 X 20MM FEMALE ENDS
35	P0790035	INSIDE GEAR PLATE
36	P0790036	DOUBLE GEAR 52T/12T
37	P0790037	BUSHING
38	P0790038	SPACER 5 X 20MM MALE ENDS
39	P0790039	GEAR 12T
40	P0790040	BALL BEARING 6203ZZ
41	P0790041	PHLP HD SCR M5-.8 X 8
42	P0790042	EXT TOOTH WASHER 5MM
43	P0790043	SPACER
44	P0790044	SET SCREW M5-.8 X 8
45	P0790045	PHLP HD SCR M5-.8 X 10
46	P0790046	CABLE CLAMP
47	P0790047	TOP COVER
48	P0790048	CAP SCREW M5-.8 X 10
49	P0790049	BELT GUARD
50	P0790050	CAP SCREW M5-.8 X 12

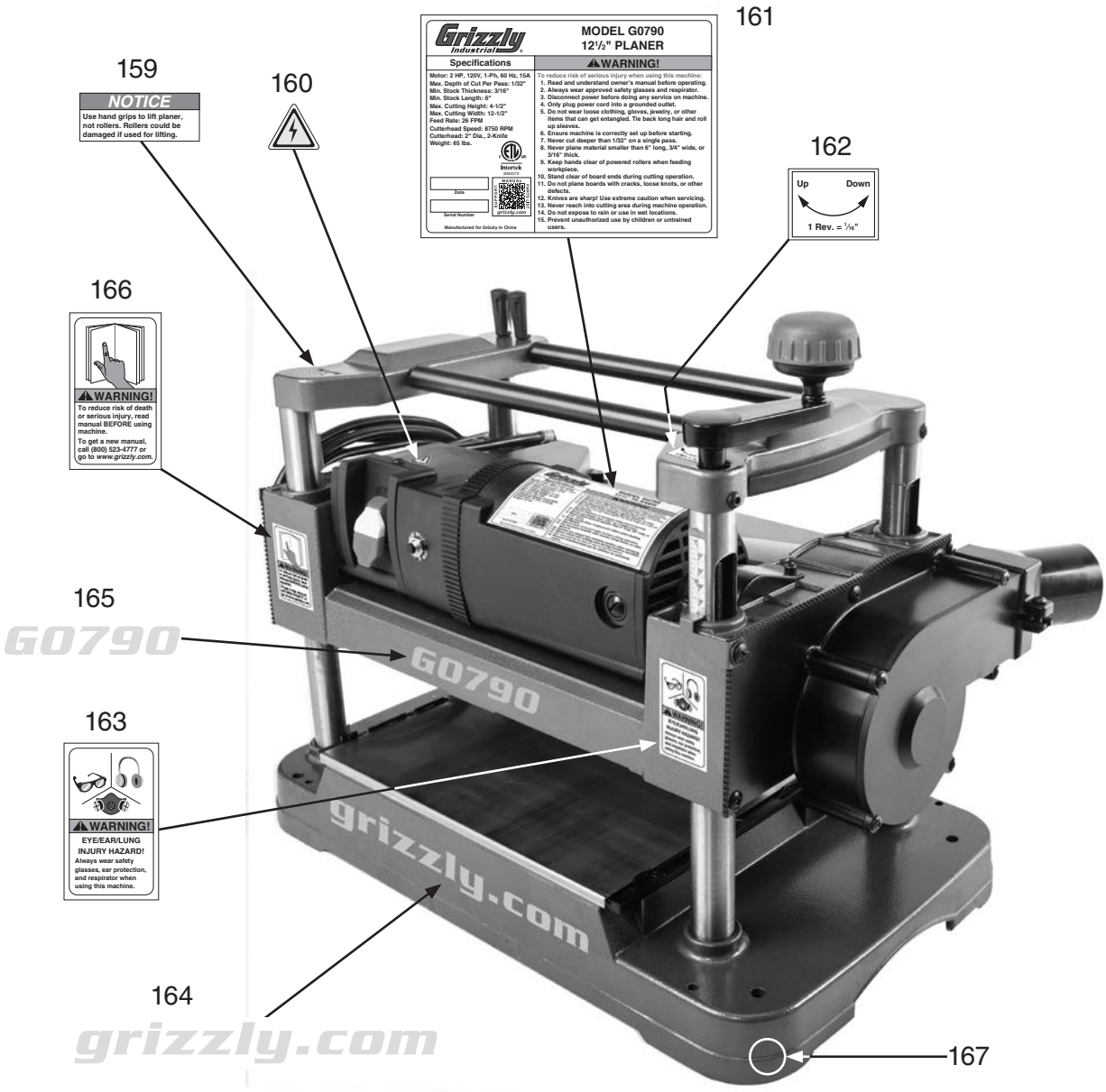
REF	PART #	DESCRIPTION
51	P0790051	FLAT WASHER 8MM
52	P0790052	CAP SCREW M8-1.25 X 20
53	P0790053	CUTTERHEAD
54	P0790054	BLADE LOCATING PIN
55	P0790055	PHLP HD SCR M6-1 X 16
56	P0790056	GIB
57	P0790057	KNIFE 12-1/2" X 1/4" X 1/32" (SET OF 2)
58	P0790058	COMPRESSION SPRING
59	P0790059	KEY 5 X 5 X 10
60	P0790060	MOTOR PULLEY
61	P0790061	BALL BEARING 6203ZZ
62	P0790062	BEARING RETAINER
63	P0790063	CAP SCREW M5-.8 X 10
64	P0790064	CUTTERHEAD PULLEY
65	P0790065	V-BELT 6V 13.5L
66	P0790066	SCALE INDICATOR
67	P0790067	FENDER WASHER 6MM
68	P0790068	PHLP HD SCR M6-1 X 12
69	P0790069	BLOWER FAN
70	P0790070	FENDER WASHER 6MM
71	P0790071	BUTTON HD CAP SCR M6-1 X 12 LH
72	P0790072	FAN COVER
73	P0790073	TAP SCREW M5 X 15
74	P0790074	FAN SHAFT
75	P0790075	TAP SCREW M5 X 12
76	P0790076	DUST GUIDE
77	P0790077	DEFLECTOR
78	P0790078	FAN HOUSING
79	P0790079	BUTTON HD CAP SCR M6-1 X 25
80	P0790080	DUST PORT
81	P0790081	EXT RETAINING RING 15MM
82	P0790082	SPROCKET 10T
83	P0790083	CHAIN FOR FEED ROLLERS
84	P0790084	COMPRESSION SPRING (OUTFEED)
85	P0790085	OUTFEED ROLLER
86	P0790086	COMPRESSION SPRING (INFEED)
87	P0790087	INFEED ROLLER
88	P0790088	SPROCKET 8T
89	P0790089	FEED ROLLER RETAINING BLOCK
90	P0790090	FEED ROLLER BRACKET (LEFT)
91	P0790091	CAP SCREW M5-.8 X 10
92	P0790092	FEED ROLLER BRACKET (RIGHT)
93	P0790093	CAP SCREW M5-.8 X 10
94	P0790094	GUIDE
95	P0790095	TABLE
96	P0790096	CAP SCREW M5-.8 X 10
97	P0790097	LEADSCREW NUT
99	P0790099	COLUMN LEADSCREW (LEFT)
100	P0790100	COLUMN

REF	PART #	DESCRIPTION
101	P0790101	COLUMN LEADSCREW (FRONT RIGHT)
102	P0790102	COLUMN
103	P0790103	ELEVATION SCALE
104	P0790104	BASE
105	P0790105	EXT RETAINING RING 30MM
106	P0790106	BALL BEARING 6000ZZ
107	P0790107	BEARING RETAINER
108	P0790108	SPACER
109	P0790109	SPROCKET 10T
110	P0790110	FENDER WASHER 4MM
111	P0790111	CAP SCREW M4-.7 X 12
113	P0790113	CAP SCREW M5-.8 X 10
114	P0790114	IDLER BRACKET
115	P0790115	FENDER WASHER 5MM
116	P0790116	CAP SCREW M5-.8 X 10
117	P0790117	SPROCKET 10T
118	P0790118	SPACER
119	P0790119	FENDER WASHER 6MM

REF	PART #	DESCRIPTION
120	P0790120	BUTTON HD CAP SCR M6-1 X 20
121	P0790121	CHAIN
122	P0790122	HEX WRENCH 4MM
123	P0790123	KNIFE CHANGING MAGNET
127	P0790127	MOTOR PIVOT ROD
130	P0790130	CAP SCREW M5-.8 X 10
131	P0790131	COLUMN LEADSCREW (REAR RIGHT)
155	P0790155	MOTOR 2HP 120V 1-PH
155-1	P0790155-1	POWER CORD 14G 3W 72" 5-15P
155-2	P0790155-2	MOTOR BRUSHES (2-PC SET)
155-3	P0790155-3	CIRCUIT BREAKER 15A 125/250VAC
155-4	P0790155-4	GRIZZLY SAFETY PADDLE SWITCH
156	P0790156	FLAT WASHER 5MM
157	P0790157	LOCK WASHER 4MM
158	P0790158	FLAT WASHER 4MM
168	P0790168	DUST BAG
169	P0790169	DUST BAG CLAMP ASSEMBLY

Please Note: *We do our best to stock replacement parts whenever possible, but we cannot guarantee that all parts shown here are available for purchase. Call* ***(800) 523-4777*** *or visit our online parts store at* ***www.grizzly.com*** *to check for availability.*

Labels & Cosmetics



REF	PART #	DESCRIPTION
159	P0790159	USE HAND GRIPS NOTICE LABEL
160	P0790160	ELECTRICITY LABEL
161	P0790161	MACHINE ID LABEL
162	P0790162	REVOLUTION SCALE
163	P0790163	INJURY HAZARD WARNING LABEL

REF	PART #	DESCRIPTION
164	P0790164	GRIZZLY.COM LABEL
165	P0790165	MODEL NUMBER LABEL
166	P0790166	READ MANUAL WARNING LABEL
167	P0790167	GRIZZLY GREEN TOUCH-UP PAINT

⚠WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine MUST replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.

Grizzly Industrial, Inc. WARRANTY CARD

Name _____

Street _____

City _____ State _____ Zip _____

Phone # _____ Email _____

Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. ***Of course, all information is strictly confidential.***

1. How did you learn about us?

____ Advertisement ____ Friend ____ Catalog
____ Card Deck ____ Website ____ Other:

2. Which of the following magazines do you subscribe to?

____ Cabinetmaker & FDM
____ Family Handyman
____ Hand Loader
____ Handy
____ Home Shop Machinist
____ Journal of Light Cont.
____ Live Steam
____ Model Airplane News
____ Old House Journal
____ Popular Mechanics
____ Popular Science
____ Popular Woodworking
____ Precision Shooter
____ Projects in Metal
____ RC Modeler
____ Rifle
____ Shop Notes
____ Shotgun News
____ Today's Homeowner
____ Wood
____ Wooden Boat
____ Woodshop News
____ Woodsmith
____ Woodwork
____ Woodworker West
____ Woodworker's Journal
____ Other:

3. What is your annual household income?

____ $20,000-$29,000 ____ $30,000-$39,000 ____ $40,000-$49,000
____ $50,000-$59,000 ____ $60,000-$69,000 ____ $70,000+

4. What is your age group?

____ 20-29 ____ 30-39 ____ 40-49
____ 50-59 ____ 60-69 ____ 70+

5. How long have you been a woodworker/metalworker?

____ 0-2 Years ____ 2-8 Years ____ 8-20 Years ____ 20+ Years

6. How many of your machines or tools are Grizzly?

____ 0-2 ____ 3-5 ____ 6-9 ____ 10+

7. Do you think your machine represents a good value? _____Yes _____No

8. Would you recommend Grizzly Industrial to a friend? _____Yes _____No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?
Note: *We never use names more than 3 times.* _____Yes _____No

10. Comments: _____

_____

_____

_____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE

Place
Stamp
Here

GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069

FOLD ALONG DOTTED LINE

Send a Grizzly Catalog to a friend:

Name_____

Street_____

City_____State_____Zip_____

TAPE ALONG EDGES--PLEASE DO NOT STAPLE

WARRANTY & RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number,'' which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.